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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,355	12/28/2000	Donald J. Cook	BUR920000172US	8838

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EXAMINER

KOBER, RUSSELL MARC

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 07/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,355

Applicant(s)

COOK ET AL.

Examiner

Russell M Kobert

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

Art Unit: 2829

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1, 3-6, 8, 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Hembree et al (6181144).

Hembree et al anticipates a system (Figures 6A and 6B) for testing a DUT (12) having a plurality of probe pads (14Vcc-1, 14Vcc-2, etc.), comprising:

A forcing probe for contacting and applying a first electrical signal to a first one of the plurality of probe pads;

A sensing probe (either one of 22-1 or 22-2) for contacting the first one of the plurality of probe pads and sensing a second electrical signal at the first one of the plurality of probe pads; and

A variable power supply (inherent to the multimeter 38) in electrical communication with the forcing probe and the sensing probe, the variable power supply capable of adjusting the first electrical signal based upon the second electrical signal (col 8, ln 51-63); as recited in claim 1.

Hembree et al anticipates a method of testing a DUT having a plurality of probe pads, comprising the steps of:

Providing a first electrical signal to one of the plurality of probe pads;

Sensing a second electrical signal at the one of the plurality of probe pads; and

Adjusting the first electrical signal based upon the second electrical signal (col 8, In 16-27, 51-63); as recited in claim 9.

As to claim 3, having a voltmeter electrically connected between the sensing probe and the variable power supply, the voltmeter for measuring the second electrical signal is anticipated (col 7, In 54-58);

As to claim 4, a probe card (20) supporting the forcing probe and the sensing probe is shown;

As to claim 5, first and second sensing electrodes (36-1B and 36-2B) and a sensing instrument (38), the first sensing electrode in electrical communication with the variable power supply, the second sensing electrode in electrical communication with the sensing instrument is shown;

As to claim 6, the sensing instrument being a current meter is anticipated (a current meter is a function of multimeter 36)

As to claim 8, a feedback controller electrically connected between the sensing probe and the variable power supply is anticipated (col 8, In 51-63);

As to claim 15, having the first electrical signal provided via a forcing probe (either one of 22-1 or 22-2) and a power supply (inherent to the multimeter 38) in electrical communication with the forcing probe is shown;

As to claim 16, the power supply having a feedback controller for adjusting the first electrical signal based upon the second electrical signal is anticipated (col 8, ln 51-63);

As to claim 17, the step of providing a feedback signal in proportion to the second electrical signal for adjusting the first electrical signal is anticipated (col 8, ln 51-63).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 2, 10, 11, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hembree et al (6181144).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a plurality of forcing probes and a plurality of variable power supplies, each of the forcing probes being in electrical communication with a corresponding one of the plurality of power supplies as mentioned in claim 2, a plurality of first electrical signals and a plurality of second electrical signals as further described in claim 11 and a plurality of forcing probes along with a plurality of power supplies as further described in claim 12 because it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art (193 USPQ 8).

As to claim 10, measuring a third electrical signal at a second one of the plurality of probe pads only requires routine skill in the art because the process duplicates the sensing step of claim 9 for a duplicate probe pad;

As to claim 14, having each of the power supplies including a feedback controller for adjusting a corresponding one of the plurality of first electrical signals based upon a corresponding one of the plurality of second electrical signals is shown in Hembree et al (Figure 7 and col 8, ln 51-63).

5. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hembree et al (6181144) in view of Bove et al (4038599).

Bove et al shows a plurality of forcing probes (19), a plurality of variable power supplies (T1-T9) and a switching matrix (Figure 4), the plurality of forcing probes being selectively connectable to the plurality of variable power supplies via the switching matrix (col 9, ln 12 – col 10, ln 47) as mentioned in claims 7 and 13.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the teaching of Bove et al with that of Hembree et al to make the claimed invention because each teach the determination of the electrical integrity of a conductive path between two pads on a device under test (col 10, ln 45-47).

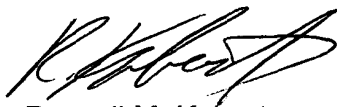
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

LeCroy, Jr. (4423373) shows a dual test probe.

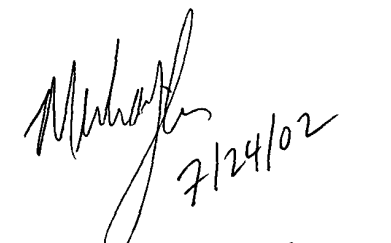
7. A shortened statutory period for response to this action is set to expire three month(s) from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kobert whose telephone number is (703) 308-5222.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Russell M. Kobert
Patent Examiner
Group Art Unit 2829
July 23, 2002



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